

### Abstract

A multiplexing video decoding apparatus for decoding video signals of a plurality of channels and a method therefor are provided. The multiplexing video decoding method receives bit streams, each of which has a plurality of slices, in a plurality of channels and decodes bit streams of the plurality of channels in a multiplexed mode. The multiplexing video decoding method includes sequentially decoding video signals of the bit stream on a slice interval basis in one channel in the plurality of channels, and when the slice has been decoded, switching to decode a slice for each of the other channels; and decoding in a multiplexed mode bit streams of a plurality of channels by repeating the above steps to the following slice of each of the channels. The apparatus includes a plurality of FIFO memories for receiving and processing the multiple bit streams in parallel, a processor for sequentially decoding the bit streams from the FIFO memories, and a video processor to reproduce a video signal.